

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: James D. Linder  
Serial No.: 10/034,491  
Filing date: December 27, 2001  
Group Art Unit: 2174  
Confirmation No.: 1247  
Title: COMPUTER AIDED DESIGN SYSTEM HAVING  
BUSINESS PROCESS ATTRIBUTES

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

**Response to Second Notice of Noncompliant Appeal Brief**

Appellant has appealed to the Board of Patent Appeals and Interferences from the decision of the Examiner mailed July 14, 2006, finally rejecting Claims 1-16, and 18-24, which are all pending in this case. On September 13, 2006, Appellant filed a Notice of Appeal. On December 6, 2006, Appellant filed an Appeal Brief. On January 16, 2007, the PTO mailed a Notice of Noncompliant Appeal Brief stating: "Summary of claimed subject matter must identify and map all independent claims on appeal (1, 3, 12 & 18) to the specification by page and line number or paragraph number and/or drawings, if any." On February 13, 2007, in response to the Notice of Noncompliant Appeal Brief, Appellant filed a Response, which included a Replacement Summary of Claimed Subject Matter.

On July 2, 2007, the PTO mailed a second Notice of Noncompliant Appeal Brief stating: "The statement of the subject matter defined in each of the independent claims is not concise. Evidence and related appeals should not be listed as not applicable, if there is no

evidence or related appeals then an appropriate response would be 'none'." Applicants did not understand how the filings were non-compliant and attempted to reach the signatory examiner, Examiner Kristine Kincaid on July 26, 2007 and July 27, 2007 for clarification – leaving voicemails on both occasions. To date, Appellants have not received a return phone call from Examiner Kincaid.

Appellants believe the second Notice of Noncompliant Appeal Brief seeks a single document with the original Appeal Brief of December 6, 2006 and the amendment, Replacement Summary of Claimed Subject Matter, filed on February 13, 2007. If this is the case, Appellants submit that this is incorrect as indicated in MPEP 1205.03:

When the Office holds the brief to be defective solely due to appellant's failure to provide a summary of the claimed subject matter as required by 37 CFR 41.37(c)(1)(v), an entire new brief need not, and should not, be filed. Rather, a paper providing a summary of the claimed subject matter as required by 37 CFR 41.37(c)(1)(v) will suffice.

Notwithstanding the above, Appellants submit a single document with the Appeal Brief of December 6, 2006 and the amendment, Replacement Summary of Claimed Subject Matter, filed on February 13, 2007. As before, the appendices indicate "NONE" for the both the related proceedings and the evidence.

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**Real Party In Interest**

The present Application was assigned to UGS PLM Solutions Inc., a Delaware corporation, as indicated by an assignment from Electronic Data Systems Corporation to UGS PLM Solutions Inc. as recorded on February 4, 2004 in the Assignment Records of the United States Patent and Trademark Office at Reel 014307, Frame 0325.

**Related Appeals and Interferences**

There are no known appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in this pending appeal.

**Status of Claims**

Claims 1-16 and 18-24 are pending in this application and all stand rejected under a Final Office Action mailed July 14, 2006. Claim 17 has been cancelled without prejudice or disclaimer. Appellant presents Claims 1-16 and 18-24 for appeal. Appendix A shows appealed Claims 1-16 and 18-24.

**Status of Amendments**

The Examiner has entered the amendments that were submitted before the Final Office Action mailed July 14, 2006. No further amendments have been submitted.

**Summary of Claimed Subject Matter**

FIGURE 1 of Appellant's specification is a block diagram of a design system 10 that includes a user interface 12, a digital model data set 14, a smart model attribute data set 16, a business process attribute data set 18, and a knowledge base data set engine 20. User interface 12 interacts with digital model data set 14. Digital model set 14 comprises information defining a physical structure of components of an assembly, as an example, in a computer aided design environment. Digital model data set 14 may comprise data that specifies the size and orientation of various components within a more complex mechanical assembly. Digital model data set 14 receives and is linked to additional information from smart model attribute data set 16. Smart model attribute data set 16 also interacts with user interface 12. Smart model attribute data set 16 provides additional information that is linked to various features specified within digital model data set 14. For example, digital model data set 14 may comprise the dimensions and orientations of a particular bracket within a complex mechanical assembly. In this example, smart model attribute data set 16 may comprise information associated with the type of material used to construct the bracket as well as tolerance information associated with the dimensions of the bracket and process information, such as, for example, heat treatments, finishes, specific coatings, lubricants or other processing used to construct the bracket. *Page 5, lines 1 - 21.*

Business process attribute data set 18 further augments the digital model data set 14. Business process attribute data set 18 comprises attributes that are related to business processes associated with the components within the assembly. For example, a business process attribute stored within business process attribute data set 18 may comprise an information address field, a safety information field, a quality information field, or a revision information field. *Page 5, line 22 - Page 6, line 9.*

Business process attribute data set 18 and the smart model attribute data set 16 are enhanced by being automatically inferentially populated through the operation of knowledge base data set engine 20. Knowledge base data set engine 20 receives information from uniform resource locators 22, local data bases 24, and external data bases that supply information to either the smart model attribute data set 16 or the business process attribute data set 18 during the design of the digital model data set 14. For example, if a designer specifies that a particular bracket within an assembly is to be constructed using a particular type of steel, knowledge base data set engine 20 could automatically inferentially create and link a smart model attribute defining a particular heat treatment process that is required or



suggested with that type of steel and could also inferentially create and link a business process attribute that any use of the required or suggested process indicates that the component is critical to quality and is a major safety concern. In this manner, a designer who may or may not know of the various structural and mechanical options available to him and the associated business processes can benefit from the information managed by the knowledge base data set engine 20 which will inferentially link structures designed in the digital model data set 14 during the design process to applicable smart model and business process attributes. *Page 6, lines 12 - 29.*

FIGURE 2 shows examples of business process attributes such as a quality information display indicator 38 and a revision display indicator 40 associated with surface 32 that may be stored in business process attribute data set 18 of FIGURE 1. Quality information may comprise various levels of information such as, for example, information specifying that a particular process, feature, or element may be critical to quality, a key characteristic or of no concern to quality. These could be represented by quality display instances of "CTQ" for critical to quality, "KC" for key characteristic or be left blank if the feature or process is not a quality concern. Similarly, the revision information associated with revision display indicator 40 may communicate a revision number or other identifier to a user of the system 10. In this manner, a user can be made to understand that a particular process or feature within the digital model data set 14 was changed during a particular revision. In the example shown in FIGURE 2, the revision display indicator 40 specifies that surface 32 or its associated processes were changed in Revision 2. *Page 8, lines 7 - 19.*

FIGURE 2 also shows a safety indicator indicated generally at 36. Surface 32 and, specifically, the process defining the application of lubricant to surface 32 has been identified in the example shown in FIGURE 2 as being a critical safety concern. A safety business process attribute may have various values such as, for example, the attribute may be a "critical", "major", or "minor" concern to safety. The display element 36 shown in FIGURE 2 illustrates one potential method of communicating this safety information to a user of the system. For example, a critical safety concern might result in a display of a safety level 1 in a triangle, a major safety concern could result in the result of a safety level 2 in a triangle and a minor safety concern could result in the display of a safety level 3 in a triangle. *Page 7, line 29 - Page 8, line 6.*

For the convenience of the Board, Appellant provides the following mapping of the four independent claims here on appeal. Appellant does not necessarily identify all portions

of the Specification and drawings relevant to the recited elements of the claims. Appellant provides the following mapping not to limit the scope of the claims, but to help the Board make a decision on this Appeal.

Independent Claim 1 recites the following:

- 7, A data processing system (e.g., Figure 1; Page 5, Line 2, through Page Line 2), comprising:
- a user interface operable to display information to a user and to receive commands from a user accessing a digital model data set (e.g., element 12 in Figure 1; Page 5, Lines 3-4; Page 7, Lines 15-20);
  - a digital model data set comprising data associated with the form of mechanical structures (e.g., element 14 in Figure 1; Page 5, Lines 4-14; Page 6, Lines 3-11); and
  - a business process attribute data set linked to the digital model data set such that various elements within the digital model data set are linked to business process attributes within the business process attribute data set (e.g., element 18 in Figure 1; Page 5, Lines 22-29) such that users of the data processing system are displayed business process attribute display elements when a display element associated with a mechanical component defined by the digital model data set is displayed to the user (e.g., Page 5, Line 30, through Page 6, Line 11); and
    - wherein the business process attribute comprises one of:
      - quality information defining a quality level parameter associated with a component represented in the digital model data set (e.g., element 38 in Figure 2; Page 6, Lines 6-11; Page 8, Lines 7-13);
      - safety information defining a safety level parameter associated with a component represented in the digital model data set (e.g., element 36 in Figure 2; Page 6, Lines 6-11; Page 7, Line 29, through Page 8, Line 6);
      - revision information defining a revision parameter associated with a component represented in the digital model data set (e.g., element 40 in Figure 2; Page 6, Lines 6-11; Page 8, Lines 14-19); and
      - an information address attribute comprising a network address associated with information related to a component associated with data within the digital model data set (e.g., Figure 2; Page 6, Lines 3-6; Page 7, Lines 11-28).

Independent Claim 3 recites the following:

A data processing system (e.g., Figure 1; Page 5, Line 2, through Page 7, Line 2), comprising:

- a user interface operable to display information to a user and to receive commands from a user accessing a digital model data set (e.g., element 12 in Figure 1; Page 5, Lines 3-4; Page 7, Lines 15-20);

- a digital model data set comprising data associated with the form of mechanical structures (e.g., element 14 in Figure 1; Page 5, Lines 4-14; Page 6, Lines 3-11);

- a business process attribute data set linked to the digital model data set such that various elements within the digital model data set are linked to business process attributes within the business process attribute data set (e.g., element 18 in Figure 1; Page 5, Lines 22-29) such that users of the data processing system are displayed business process attribute display elements when a display element associated with a mechanical component defined by the digital model data set is displayed to the user (e.g., Page 5, Line 30, through Page 6, Line 11); and

- wherein the business process attribute comprises safety information defining a safety level parameter associated with a component represented in the digital model data set (e.g., element 36 in Figure 2; Page 7, Line 29, through Page 8, Line 6).

Independent Claim 12 recites the following:

A method of operating a digital design system (e.g., Figure 3; Page 9, Line 22, through Page 10, Line 27) comprising:

- defining digital model data set information specifying the structure of components within an assembly (e.g., Figure 3; Page 9, Lines 24-30);

- defining business process attributes linked to particular features specified within the digital model data set (e.g., Figure 3; Page 9, Lines 30-32);

- displaying instances of features within the digital model data set which are associated with such business process attributes (e.g., Figure 2; Figure 3; Page 7, Lines 11-28);

- displaying business process attribute display instances associated with business process attributes linked to the displayed features within the digital model data set (e.g., Figure 2; Figure 3; Page 7, Line 29, through Page 8, Line 19); and

- further comprising automatically inferentially applying business process attributes to features within the digital model data set through the operation of an automated knowledge base data set engine operable to store associations between potential features which may be used in digital model data sets and inferred business process attributes associated with such features (e.g., element 20 in Figure 1; Figure 3; Page 9, Line 32, through Page 10, Line 14).

Independent Claim 18 recites the following:

A data processing system (e.g., Figure 1; Page 5, Line 2, through Page 7, Line 2), comprising:

- a user interface operable to display information to a user and to receive commands from a user accessing a digital model data set (e.g., element 12 in Figure 1; Page 5, Lines 3-4; Page 7, Lines 15-20);

- a digital model data set comprising data associated with the form of mechanical structures (e.g., element 14 in Figure 1; Page 5, Lines 4-14; Page 6, Lines 3-11);

- a business process attribute data set linked to the digital model data set such that various elements within the digital model data set are linked to business process attributes within the business process attribute data set (e.g., element 18 in Figure 1; Page 5, Lines 22-29) such that users of the data processing system are displayed business process attribute display elements when a display element associated with a mechanical component defined by the digital model data set is displayed to the user (e.g., Page 5, Line 30, through Page 6, Line 11); and

- a knowledge base data set engine (e.g., element 20 in Figure 1; Page 6, Lines 11-19) coupled to and operable to access various knowledge base data sets (e.g., elements 22, 24, 26, and 28 in Figure 1; Page 6, Lines 11-19), the knowledge base data set engine operable to inferentially apply business process attributes to features within the digital model data set responsive to information linked to such features within the knowledge base data sets accessible to the knowledge base data set engine (e.g., Page 6, Line 19, through Page 7, Line 2).

**Ground of Rejections to be Reviewed on Appeal**

Appellant requests that the Board review the following rejections:

1. Claims 1, 3, 7, 9, 12, 14, 18, 20, and 24 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,625,798 to Badders et al. (“*Badders*”);
2. Claims 2, 4, 8, 10, 13, 15, 19, and 21 under 35 U.S.C. § 103(a) as being unpatentable over *Badders* in view of U.S. Patent No. 6,295,513 to Thackston (“*Thackston*”); and
3. Claims 5, 6, 11, 16, 22, and 23 under 35 U.S.C. § 103(a) as being unpatentable over *Badders* and *Thackston* in view of U.S. Publication No. 2002/0026385 issued to McCloskey et al (“*McCloskey*”).

**Argument**

The PTO's rejection of Claims 1-16 and 18-24 is improper, and the Board should withdraw the rejection for the reasons stated below.

**I. Standards**

**A. 35 U.S.C. §102**

With regard to 35 U.S.C. § 102 “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987); M.P.E.P. § 2131. In addition, “[t]he identical invention must be shown in as complete detail as contained in the . . . claim.” M.P.E.P. § 2131 citing *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). Furthermore, “[t]he elements must be arranged as required by the claim.” *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990); M.P.E.P. § 2131.

**B. 35 U.S.C. §103(a)**

With regard to 35 U.S.C. § 103, “the prior art reference (or references when combined) must teach or suggest all the claim limitations.” M.P.E.P. § 2142.

**II. The PTO has Failed to Provide the Requisite *Prima Facie* Showing of Each and Every Element as Required under 35 U.S.C. §102 in Rejecting Claims 1, 3, 7, 9, 12, 14, 18, 20, and 24**

The PTO rejected Claims 1, 3, 7, 9, 12, 14, 18, 20, and 24 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,625,798 to Badders et al. (“*Badders*”). Appellant traverses this rejection.

**A. *Badders* does not disclose displaying business process attribute display elements when a mechanical component is displayed to the user**

Claim 18 is allowable at least because *Badders* fails to disclose “a business process attribute data set linked to the digital model data set . . . such that users of the data processing system are displayed business process attribute display elements when a display element associated with a mechanical component defined by the digital model data set is displayed to the user.” The PTO points to Column 3, lines 32-37 of *Badders* in rejecting this claim. Appellant respectfully submits that this rejection is improper because *Badders* does not disclose displaying business process attributes when a mechanical component is displayed to the user. Instead, the cited portion of *Badders* merely discloses extracting attribute data in a

spreadsheet after the drawing is completed. For example, *Badders* describes the process at Column 4, line 65 - Column 5, line 13 stating:

When the user has finished drawing the CAD drawing using input device 58 and CAD software 56, the database files 52 are generated using processor 50 by extracting the attributes included in the CAD blocks of memory 54 based on the drawing designed using the CAD software 56. In effect, the graphical attribute information is appended into the corresponding equipment database file. Therefore, the database files 52 include a reflection of what is included in the CAD software graphics file with additional attribute information relating to each of the components of the drawing. Processor 50 then translates each of the database files 52 into an output file 60 such as a Lotus.RTM. file. The output file 60 may then be printed using a printer 62 so that hard copy reports may be provided relating to each of the attributes of the components included in the CAD drawing.

Simply put, *Badders* teaches a one-way extraction of attribute data from a CAD drawing to database files after the user finishes the CAD drawing, but does not disclose displaying the attributes when a display element associated with a mechanical component is displayed to the user. For at least this reason, Claim 18 is and its dependents are allowable. In addition, Claims 1, 3, and 12 are each allowable for analogous reasons, as are all the claims depending therefrom.

**B. *Badders* does not disclose automatically inferentially applying business process attributes**

Claim 12 is allowable also at least because *Badders* does not teach or suggest “automatically inferentially applying business process attributes to features within the digital model data set.” The PTO relies on Column 6, lines 41-49 in rejecting this claim. Appellant respectfully submits that this rejection is improper because *Badders* does not disclose automatically inferentially applying business process attributes. Rather, the cited portion merely discloses a database file capable of storing attributes. For example, *Badders* explicitly states that the database file is initially empty. *See Badders*, Column 4 lines 12-13. Next, *Badders* indicates that attribute information relating to components is entered manually by a user of the CAD software. *See Badders*, Column 4 lines 57-65. However, no mention is made of automatically inferentially applying attributes, especially business process attributes as recited by Claim 12. For at least this reason, Claim 12 is allowable as are all the claims depending therefrom.

**C. *Badders* does not disclose safety information defining a safety level parameter**

Claim 3 is allowable also at least because *Badders* does not teach or suggest “wherein the business process attribute comprises safety information defining a safety level parameter associated with a component represented in the digital model data set.” The PTO relies on the mere mention of OSHA data at Column 2 line 45 of *Badders* in rejecting this claim. Appellant respectfully submits that this rejection is improper because this portion of *Badders* does not show a business process attribute that comprises safety information defining a safety level parameter. Clearly, OSHA data are not safety level parameters, even if it is contended that this information relates to safety. For at least this reason, Claim 3 is allowable as are all the claims depending therefrom.

**III. The PTO has Failed to Provide the Requisite *Prima Facie* Showing of Each and Every Element as Required under 35 U.S.C. §103 in Rejecting Claims 2, 4, 8, 10, 13, 15, 19, and 21**

The PTO rejected Claims 2, 4, 8, 10, 13, 15, 19, and 21 under 35 U.S.C. § 103(a) as being unpatentable over *Badders* in view of U.S. Patent No. 6,295,513 to Thackston (“*Thackston*”). Appellant traverses this rejection.

**A. The cited references do not disclose quality level information**

Claim 13 is allowable also at least because the cited references do not teach or suggest “wherein the business process attribute comprises a quality information attribute and wherein the business process attribute display instance specifies quality level information.” The PTO concedes in the Final Office Action that *Badders* does not teach quality level information. See Final Office Action, Page 5. Rather, the PTO cites Column 16, lines 34-51 of *Thackston* in rejecting this claim. Appellant respectfully submits that this rejection is improper because *Thackston* does not disclose quality level information. Instead, the cited portion of *Thackston* generally teaches associating a name of a manufacturing standard with a graphical entity. For example, the name of the manufacturing standard may be a Department of Defense document identifier, such as MIL-STD-5556.8. See *Thackston*, Column 16, lines 36-46. However, the name of a manufacturing standard and a quality level are not the same thing. For at least this reason, Claim 13 is allowable as are all the claims depending therefrom. In addition, Claims 2, 8, and 19 are each allowable for analogous reasons, as are all the claims depending therefrom.



**B. The cited references do not disclose revision information associated with features within the digital model data set**

Claim 15 is allowable also at least because the cited references do not teach or suggest “displaying instances of features within the digital model data set which are associated with such business process attributes” and “wherein the business process attribute display instance specifies revision information associated with the feature to which the revision information business attribute is linked.” The PTO relies on *Thackston*’s Column 15, lines 28-45 in rejecting this claim. Appellant respectfully submits that this rejection is improper because *Thackston* teaches storing a version number for a digital model document. For example, *Thackston* describes that version numbers of documents are maintained as part of *Thackston*’s electronic document control. See *Thackston*, Column 14 line 65 - Column 15 line 3 and Column 16, lines 1-4. However, at no point does *Thackston* disclose displaying revision information associated with features within the digital model data set. For at least this reason, Claim 15 is allowable as are all the claims depending therefrom. In addition, Claims 4, 10, and 21 are each allowable for analogous reasons, as are all the claims depending therefrom.

**IV. The PTO has Failed to Provide the Requisite *Prima Facie* Showing of Each and Every Element as Required under 35 U.S.C. §103 in Rejecting Claims 5, 6, 11, 16, 22, and 23**

The PTO rejected Claims 5, 6, 11, 16, 22, and 23 under 35 U.S.C. § 103(a) as being unpatentable over *Badders* and *Thackston* in view of U.S. Publication No. 2002/0026385 issued to McCloskey et al (“*McCloskey*”). Appellant traverses this rejection.

Claim 5 is allowable also at least because the cited references do not teach or suggest “wherein the business process attribute comprises an information address attribute . . . related to a component associated with data within the digital model data set.” The PTO concedes in the Final Office Action that this limitation is not shown by *Badders* - *Thackston*. See Final Office Action, Page 6. Instead, the PTO cites Paragraph 38 of *McCloskey* in rejecting this claim. Appellant respectfully submits that this rejection is improper because the cited portion of *McCloskey* merely discloses a file address for a displayed CAD drawing. For example, *McCloskey* describes embedding a file address to a CAD drawing using standard features of AutoCAD.RTM. See *McCloskey*, Paragraph 59. However, at no point does *McCloskey* teach or suggest an information address attribute related to a component within the digital model data set. For at least this reason, Claim 5 is allowable as are all the claims depending

therefrom. In addition, Claims 11, 16, and 22 are each allowable for analogous reasons, as are all the claims depending therefrom.

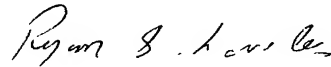
**Conclusion**

Appellant has demonstrated that the present invention, as claimed, is clearly distinguishable over the prior art cited by the Examiner. Therefore, Appellant respectfully requests the Board of Patent Appeals and Interferences to reverse the final rejection of Claims 1-16 and 18-24 and instruct the Examiner to allow Claims 1-16 and 18-24.

The Commissioner is hereby authorized to charge **\$500.00** to cover the Appeal Brief fee under 37 C.F.R. §1.17(b) to Deposit Account No. 02-0384 of Baker Botts LLP.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayments associated with this Application to Deposit Account No. 02-0384 of BAKER BOTTS LLP.

Respectfully submitted,  
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**Appendix A: Claims on Appeal**

1. (Previously Presented) A data processing system, comprising:
  - a user interface operable to display information to a user and to receive commands from a user accessing a digital model data set;
  - a digital model data set comprising data associated with the form of mechanical structures; and
  - a business process attribute data set linked to the digital model data set such that various elements within the digital model data set are linked to business process attributes within the business process attribute data set such that users of the data processing system are displayed business process attribute display elements when a display element associated with a mechanical component defined by the digital model data set is displayed to the user; andwherein the business process attribute comprises one of:
  - quality information defining a quality level parameter associated with a component represented in the digital model data set;
  - safety information defining a safety level parameter associated with a component represented in the digital model data set;
  - revision information defining a revision parameter associated with a component represented in the digital model data set; and
  - an information address attribute comprising a network address associated with information related to a component associated with data within the digital model data set.
2. (Original) The data processing system of Claim 1 wherein the business process attribute comprises quality information defining a quality level parameter associated with a component represented in the digital model data set.

3. (Previously Presented) A data processing system, comprising:  
a user interface operable to display information to a user and to receive commands from a user accessing a digital model data set;  
a digital model data set comprising data associated with the form of mechanical structures;  
a business process attribute data set linked to the digital model data set such that various elements within the digital model data set are linked to business process attributes within the business process attribute data set such that users of the data processing system are displayed business process attribute display elements when a display element associated with a mechanical component defined by the digital model data set is displayed to the user; and  
wherein the business process attribute comprises safety information defining a safety level parameter associated with a component represented in the digital model data set.

4. (Original) The data processing system of Claim 1 wherein the business process attribute comprises revision information defining a revision parameter associated with a component represented in the digital model data set.

5. (Original) The data processing system of Claim 1 wherein the business process attribute comprises an information address attribute comprising a network address associated with information related to a component associated with data within the digital model data set.

6. (Previously Presented) The data processing system of Claim 5 wherein the information address attribute comprises a hypertext link address that when displayed to a user of the system and activated by the user of a system will result in the activation of a browser program which is operable to retrieve information stored at the information attribute hypertext link address.

7. (Original) The data processing system of Claim 1 and further comprising a knowledge base data set engine coupled to and operable to access various knowledge base data sets, the knowledge base data set engine operable to inferentially apply business process attributes to features within the digital model data set responsive to information linked to such features within the knowledge base data sets accessible to the knowledge base data set engine.

8. (Original) The data processing system of Claim 7 wherein the knowledge base data set engine is operable to automatically inferentially apply a quality information business process attribute to a feature included within the digital model data set.

9. (Original) The data processing system of Claim 7 wherein the knowledge base data set engine is operable to automatically inferentially apply a safety information business process attribute to a feature included within the digital model data set.

10. (Original) The data processing system of Claim 7 wherein the knowledge base data set engine is operable to automatically inferentially apply a revision information business process attribute to a feature included within the digital model data set.

11. (Original) The data processing system of Claim 7 wherein the knowledge base data set engine is operable to automatically inferentially apply an information address link attribute to a feature included within the digital model data set.

12. (Previously Presented) A method of operating a digital design system comprising:

defining digital model data set information specifying the structure of components within an assembly;

defining business process attributes linked to particular features specified within the digital model data set;

displaying instances of features within the digital model data set which are associated with such business process attributes;

displaying business process attribute display instances associated with business process attributes linked to the displayed features within the digital model data set; and

further comprising automatically inferentially applying business process attributes to features within the digital model data set through the operation of an automated knowledge base data set engine operable to store associations between potential features which may be used in digital model data sets and inferred business process attributes associated with such features.

13. (Original) The method of Claim 12 wherein the business process attribute comprises a quality information attribute and wherein the business process attribute display instance specifies quality level information associated with the feature to which the quality information business attribute is linked.

14. (Original) The method of Claim 12 wherein the business process attribute comprises a safety information attribute and wherein the business process attribute display instance specifies safety level information associated with the feature to which the safety information business attribute is linked.

15. (Original) The method of Claim 12 wherein the business process attribute comprises a revision information attribute and wherein the business process attribute display instance specifies revision information associated with the feature to which the revision information business attribute is linked.

16. (Original) The method of Claim 12 wherein the business process attribute comprises an information source link and wherein the business process attribute display instance is operable, when activated by a user, to access a network address at which information is stored that is associated with the feature to which the information source link is linked.

17. (Cancelled)



18. (Original) A data processing system, comprising:  
a user interface operable to display information to a user and to receive commands from a user accessing a digital model data set;  
a digital model data set comprising data associated with the form of mechanical structures;  
a business process attribute data set linked to the digital model data set such that various elements within the digital model data set are linked to business process attributes within the business process attribute data set such that users of the data processing system are displayed business process attribute display elements when a display element associated with a mechanical component defined by the digital model data set is displayed to the user; and  
a knowledge base data set engine coupled to and operable to access various knowledge base data sets, the knowledge base data set engine operable to inferentially apply business process attributes to features within the digital model data set responsive to information linked to such features within the knowledge base data sets accessible to the knowledge base data set engine.

19. (Original) The data processing system of Claim 18 wherein the business process attribute comprises quality information defining a quality level parameter associated with a component represented in the digital model data set.

20. (Original) The data processing system of Claim 18 wherein the business process attribute comprises safety information defining a safety level parameter associated with a component represented in the digital model data set.

21. (Original) The data processing system of Claim 18 wherein the business process attribute comprises revision information defining a revision parameter associated with a component represented in the digital model data set.

22. (Original) The data processing system of Claim 18 wherein the business process attribute comprises an information address attribute comprising a network address associated with information related to a component associated with data within the digital model data set.

23. (Previously Presented) The data processing system of Claim 22 wherein the information address attribute comprises a hypertext link address that when displayed to a user of the system and activated by the user of a system will result in the activation of a browser program which is operable to retrieve information stored at the information attribute hypertext link address.

24. (Previously Presented) The data processing system of Claim 1 wherein the business process attribute comprises safety information defining a safety level parameter associated with a component represented in the digital model data set.

**Appendix B: Evidence**

NONE

**Appendix C: Related Proceedings**

NONE